General Services Administration
Office of Governmentwide Policy

Federal Aircraft Report - FY 2011

April 12, 2012

FY 11 Federal Aircraft Report

Welcome to the annual Federal Aircraft Report for fiscal year 2011. The Federal Aircraft Report produced by GSA is the only source of comprehensive information on the inventory, cost, use, and fuel consumption of the federal government's aviation program. The Federal Aircraft Report is generated by the Federal Aviation Interactive Reporting System (FAIRS). FAIRS is an Internet-based application that collects Federal (non-DoD) aviation program data reported by Federal agencies in accordance with guidance contained in OMB Circular A-126 *Improving the Management and Use of Government Aircraft,* which directs GSA to operate "…a government-wide aircraft management information system…" and requires the "…development of generic aircraft information system standards and software." The use of FAIRS is further called for in Federal Management Regulation 102-33 *Management of Government Aircraft*.

This Report is available at www.data.gov, the primary repository of high value, machine readable datasets generated by the Executive Branch of the Federal Government, and at GSA's Internet site, http://www.gsa.gov/portal/content/104520. Please feel free to contact GSA's FAIRS Program Manager, Jay Spurr, at joseph.spurr@gsa.gov or (202) 208-0519 if you have any questions about the report, or would like to offer comments or suggestions on its content.

The Federal Government uses aircraft to support various missions that include the management of natural resources, scientific research, search and rescue, firefighting, marine safety, research and development, and law enforcement activities. The Federal Government owns aircraft, and also leases, charters, and rents aircraft through commercial aviation service (CAS) providers. As of 09/30/2011 the Federal aircraft fleet totaled 1,752 aircraft of which 1,384 were operational. The remaining aircraft are either awaiting disposal, or are used for parts, training or static displays. The following statistics provide an overview of the program:

Federal Inventory:		Original Acquisition Cost:	$ 4,559,501,825
Airplanes	949	Market Value:	$ 1,850,130,260
Helicopters	792	Total Aircraft Costs:	$ 1,035,879,279
Unmanned Aircraft Systems	10	Accidents/Incidents:	4
Glider	1	Accident Injuries:	2
Average Age of Fleet:	28 years	Accident Fatalities:	0

Using the National Transportation Safety Board's (NTSB) formula for accident rate calculation, the Federal aviation program accident rate for FY11 was **0.87 accidents per 100,000 flight hours.** Note that t In conjunction with the Administration's goal of Federal leadership in environmental sustainability and in anticipation of the introduction of alternative jet fuels, GSA's OGP is developing a CO_2 emissions baseline for Federal (non-DoD) fleet aircraft, which details green-house gas emissions based on data collected for the FY09 thru FY11 Federal Aviation Reports. The most recent CO_2 emissions study based on FY11 fleet data revealed that the Federal aircraft program emitted a total of 430,000 Metric tons (Mt) of CO_2. To put the CO_2 emissions of the Federal aircraft program into perspective, it should be noted that total CO_2 emissions for the U.S. airline industry in 2011 were estimated to be 109 million metric tons (Mt) based on Bureau of Transportation Statistics estimates as of 3/30/2012. Thus, CO_2 emissions for Federal fleet aircraft represent approximately .004% of the commercial aviation CO_2 emissions for FY11.

Analysis. Federal agencies supported a total of 459,880 flight and flight-related hours in FY11, which represents an overall increase of 192,794 hours or 42% from 2010. Federal utilization totaled 297,250

hours, which was an increase of 100,501 hours, or 34% from FY10**.** CAS utilization totaled 162,631 hours, which represents an increase of 92,294 or 57% from 2010.

Chart 1 depicts Federal aircraft utilization for FY11 by mission type, indicating that law enforcement and surveillance missions comprise approximately 44% of all Federal aviation mission profiles.

Federal agencies paid $1,035,879,279 to operate their aircraft in FY11 – both owned and commercially contracted. This total was an increase of $ 248,627,202 or 24% from FY10. Federal costs totaled $702,485,505 and increased by $ 113,938,381 or 16% from FY10, while CAS costs for FY11 totaled $333,393,774 for an increase of $134,688,821 from FY10.

This is the lowest accident rate since accident rate tracking began in 1990.

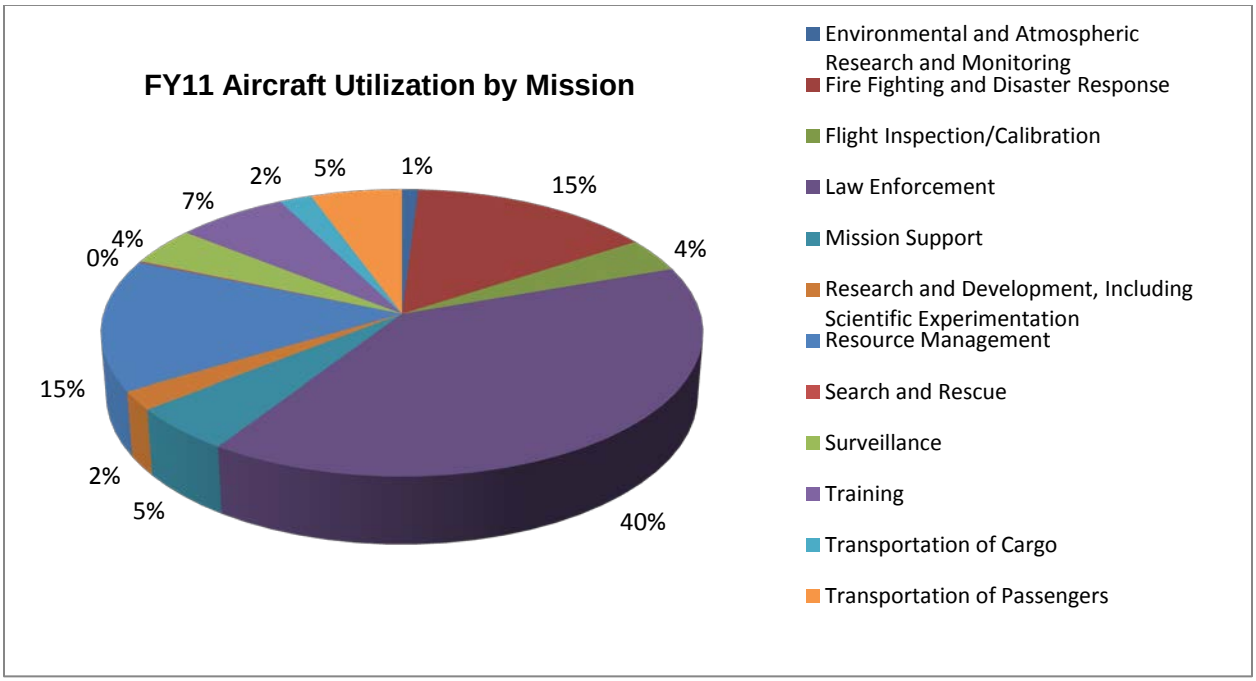

Chart 1 - FY11 Aircraft Utilization by Mission

Two of the four mandatory aviation related cost categories, as shown in Charts 2 and 3, for the 5-year period from FY07 to FY11 have remained relatively stable. However, maintenance related aviation costs are trending upward as a percentage of total annual program costs, increasing by 9% or $127M from FY07 to FY11. Fuel costs also increased by 44% or $32M from FY10 to FY11.

Chart 2 - FY07-11 Mandatory Cost Categories

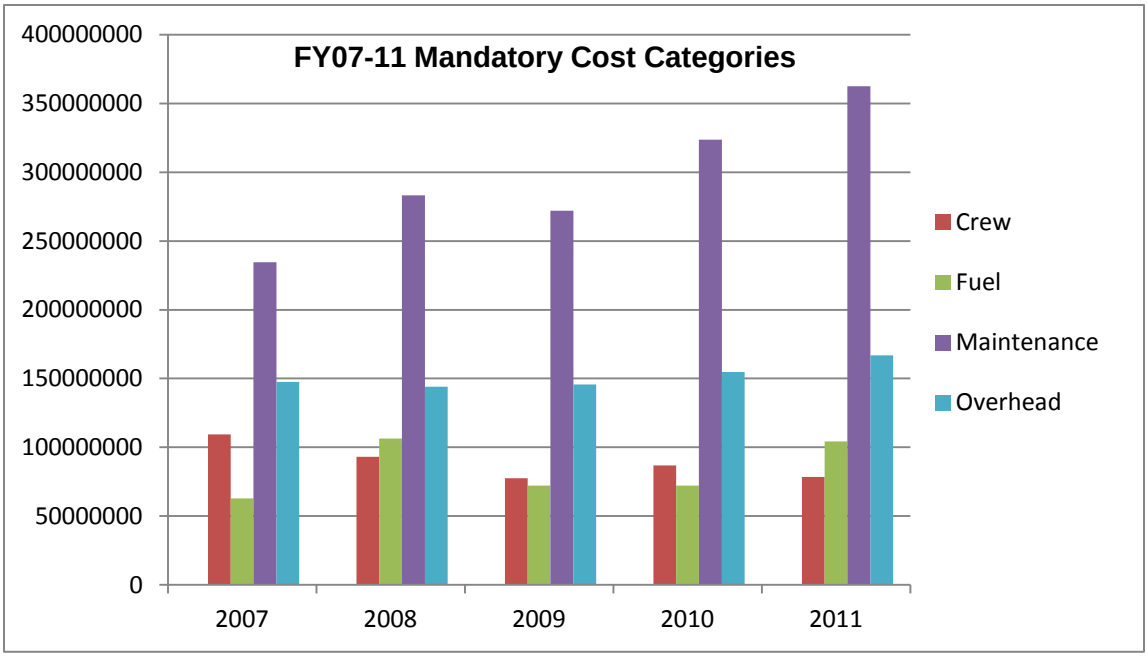

Chart 3 - FY07-11 Mandatory Cost Categories - maintenance as a percentage of total program costs

Cost Category	Fiscal Year				
	2007	2008	2009	2010	2011
Crew	$109,420,648.00	$93,136,993.00	$77,619,651.00	$86,789,339.00	$78,452,861.00
Fuel	$62,930,476.00	$106,314,491.00	$72,169,651.00	$72,157,423.00	$104,243,020.00
Maintenance	**$234,589,962.00**	**$283,102,230.00**	**$271,871,738.00**	**$323,640,403.00**	**$362,450,823.00**
Overhead	$147,492,778.00	$144,032,071.00	$145,789,006.00	$154,830,479.00	$166,886,609.00
FY07-11Totals	**$554,433,864.00**	**$626,585,785.00**	**$567,450,046.00**	**$637,417,644.00**	**$712,033,313.00**
Maintenance as a % of total program costs	42.00%	45.00%	48.00%	51.00%	51.00%

Increases in the FY11 mandatory cost categories can be attributed to four of the largest Federal aviation programs; the Department of Homeland Security (DHS), the Department of State (DOS), the National Aeronautics and Space Administration (NASA), and the Department of Justice (DOJ). A further review of each of those programs indicates that:

- DHS – reported data reflects a significant improvement in reporting overall, and specifically $42M in cost increases for their P3 fleet aircraft operations, $79.6M in maintenance and repair parts, and $14.8M in operating costs for additional UH-60 and AS350B3 helicopters.

- DOS – reported a $47.8M increase from FY10 to FY11, which includes a $35.3M increase in overhead, $4M increase in fuel costs, and $7M in increased maintenance costs.
- NASA – reported a $16.5M increase from FY10 to FY11, which includes an $8M increase in overhead, $4.5M increase in fuel costs, $3.6 increase in maintenance costs, and a $.5M increase in crew costs.
- DOJ – reported a $4.2M increase from FY10 to FY11, which includes a $3M increase in overhead costs, and a $1.7M increase in fuel costs.

Increases in FY11 CAS reporting can be attributed primarily to a significant improvement in reporting by the U.S. Department of Agriculture (USDA), and increased cost in this area reported by the Department of Homeland security and the Department of the Interior (DOI). A further review of each of those programs indicates that:

- USDA – reported a $110.4M or in CAS costs
- DHS – reported a $54.5M increase in CAS costs
- DOI – reported a $19.9M increase in CAS costs

GSA Initiatives to offset operating costs. Aircraft maintenance costs can be influenced by many factors to include inflation (which adversely affects parts, fuel and labor), increased utilization (variable maintenance costs), replacement of high-time components, modifications to mission/flight profiles, as well as aging aircraft.

With the average age of Federal aircraft now at 28 years, GSA's OGP has developed several solutions to assist in modernizing Federal aircraft fleet, which will serve to mitigate some of these costs increases, and offset potential shortfalls. Three of those recent initiatives include:

- **Amended FMR 102-39**. In the fall of 2011, Federal Management Regulation 102-39 *Replacement of Personal Property Pursuant to the Exchange/Sale Authority* was amended to remove the requirement to obtain a waiver from GSA prior to utilizing the Exchange/Sale (E/S) authority for aircraft. As a result, agencies can now utilize the E/S authority as an element of their modernization planning in a timely manner.
- **Exchange/Sale Awareness campaign**. In conjunction with that recent amendment to FMR 102-39, OGP also initiated an awareness campaign to educate the non-DoD Federal agencies, as well as the DoD, on the value of utilizing the E/S authority for aircraft and aircraft parts to upgrade or modernize fleet assets.
- **Aviation Capital Asset Planning.** For years, the Federal Government had done a tremendous job in managing its aviation resources, but has struggled to properly plan, budget for, and ultimately acquire replacement aviation assets. In response to this on-going problem, OGP worked with OMB and the Interagency Committee for Aviation Policy (ICAP) to develop an automated, aviation-specific, capital asset planning tool (CAP Tool) that will be used for aviation capital asset planning, in lieu of the existing OMB A-11 required Exhibit 300 process. The CAP Tool produces the Business Case for Acquisition and Maintenance of Aircraft (Aviation Business Case) template that dramatically reduces the planning burden on federal aviation program managers as they attempt to modernize their aviation fleet assets. More importantly though, the Aviation Business Case (CAP Tool) will be an extremely cost-effective alternative to the IT-centric Exhibit 300 by enabling the in-house completion of required capital asset planning documentation. OGP received notification from OMB on June 16, 2011 that the Aviation Business Case was approved and accepted as an alternate methodology for aviation capital asset planning as required by OMB Circular A-11, resulting in its subsequent incorporation into the revision to OMB Circular A-11 released in August 2011.

The following spread sheets detail specifics about the federal government's aviation program costs and utilization.

Table 1 - FY11 Federal Utilization (Flight Hours) by Agency

Table 2 - FY11 Commercial Aviation Services Utilization (Flight Hours) by Agency

Table 3 - FY11 Federal Utilization (Flight Hours) by Mission

Table 4 – FY11 Commercial Air Services Utilization (Flight Hours) by Mission

Table 5 – FY11 Federal Costs – All Agencies

Table 6 – FY11 Commercial Air Services Costs – All Agencies

Table 7 – FY07-11 Mandatory Cost Categories – All Agencies

Table 8 – FY07-11 Mandatory Cost Categories by Top Four Agencies

Table 9 – FY07-11 Operational Aircraft Inventory by Mission

Table 1 - FY11 Federal Utilization (Flight Hours) by Agency

Agency	**Total Flight Hours**
Department of Commerce	4,559
Department of Energy	44,797
Department of Homeland Security	82,380
Department of Justice	27,623
Department of State	71,284
Department of Transportation	22,097
Department of the Interior	20,783
National Aeronautics and Space Administration	11,814
Department of Agriculture	11,913
Total	**297,250**

Table 2 – FY11 Commercial Air Services Utilization (Flight Hours) by Agency

Agency	**Total Flight Hours**
Department of Energy	511
Department of Health and Human Services	2,216
Department of Homeland Security	15,985
Department of Justice	2,145
Department of State	2,512
Department of Transportation	12,277
Department of the Interior	45,873
National Aeronautics and Space Administration	635
Department of Agriculture	80,477
Total	**162,631**

Table 3 – FY11 Federal Utilization by Mission

Mission Category	Total Util. Hrs
Environmental and Atmospheric Research and Monitoring	4,559.20
Fire Fighting and Disaster Response	1,716.30
Flight Inspection/Calibration	16,413.50
Law Enforcement	163,717.40
Mission Support	16,803.00
Research and Development, Including Scientific Experimentation	9,042.10
Resource Management	46,026.20
Search and Rescue	433.00
Surveillance	7,064.40
Training	19,559.70
Transportation of Cargo	5,367.80
Transportation of Passengers	6,547.70
Total	**297,250.30**

Table 4 – FY11 Commercial Air Service Utilization by Mission

Mission	Hours
Fire Fighting and Disaster Response	66,185.20
Flight Inspection/Calibration	1,134.70
Law Enforcement	18,134.10
Mission Support	6,517.20
Research and Development, Including Scientific Experimentation	634.40
Resource Management	22,015.30
Search and Rescue	294.40
Surveillance	12,588.40
Training	11,480.40
Transportation of Cargo	3,624.80
Transportation of Passengers	20,021.60
Total	**162,630.50**

Table 5 – FY11 Federal Costs by Agency

Department of Commerce	$11,583,474.00
Department of Energy	$23,362,455.00
Department of Homeland Security	$164,059,177.00
Department of Justice	$50,233,834.00
Department of State	$244,815,560.00
Department of Transportation	$68,916,540.00
Department of the Interior	$10,141,779.00
National Aeronautics and Space Administration	$121,932,729.00
US Department of Agriculture	$7,439,957.00
Total	**$702,485,505.00**

Table 6 – FY11 Commercial Air Service Costs by Agency

Department of Energy	$806,038.00
Department of Health and Human Services	$2,098,285.00
Department of Homeland Security	$118,398,766.00
Department of Justice	$20,621,078.00
Department of State	$10,197,638.00
Department of Transportation	$10,016,596.00
Department of the Interior	$45,289,112.00
National Aeronautics and Space Administration	$6,893,235.00
US Department of Agriculture	$119,073,026.00
Total	**$333,393,774.00**

Table 7 - FY07-11 Four Mandatory Cost Categories – All Agencies

	2007	2008	2009	2010	2011
Crew	$109,420,648.00	$93,136,993.00	$77,619,651.00	$86,789,339.00	$78,452,861.00
Fuel	$62,930,476.00	$106,314,491.00	$72,169,651.00	$72,157,423.00	$104,243,020.00
Maintenance	$234,589,962.00	$283,102,230.00	$271,871,738.00	$323,640,403.00	$362,450,823.00
Overhead	$147,492,778.00	$144,032,071.00	$145,789,006.00	$154,830,479.00	$166,886,609.00
Total	**$554,433,864.00**	**$626,585,785.00**	**$567,450,046.00**	**$637,417,644.00**	**$712,033,313.00**

Table 8 - FY07-11 Four Mandatory Costs - Top Four Agencies

		2007	2008	2009	2010	2011	
DHS	FUEL	$11,811,345	$20,885,320	$15,755,884	$15,145,922	$39,047,124	$102,645,595
	MAINT	$39,929,302	$52,621,630	$38,279,515	$23,952,841	$125,272,314	$280,055,602
	CREW	0	0	0	0	0	$0.00
	O'HEAD	0	0	0	0	0	$0.00
							$382,701,197
DOJ	FUEL	$4,691,602	$7,159,393	$7,429,270	$6,632,369	$8,371,619	$34,284,253
	MAINT	$8,528,749	$15,891,032	$15,132,400	$19,268,628	$18,673,165	$77,493,974
	CREW	$5,233,405	$6,665,619	$6,445,938	$6,311,768	$6,451,565	$31,108,295
	O'HEAD	$10,164,751	$12,247,080	$15,458,343	$13,664,994	$16,658,718	$68,193,886
							$211,080,408
DOS	FUEL	$13,650,628	$31,621,681	$16,517,489	$11,899,268	$15,869,711	$89,558,777
	MAINT	$78,300,218	$114,301,119	$94,672,099	$103,181,156	$110,183,656	$500,638,248
	CREW	$60,645,819	$42,572,389	$30,972,984	$37,425,692	$38,959,273	$210,576,157
	O'HEAD	$105,804,044	$101,516,193	$95,672,059	$100,036,421	$135,363,728	$538,392,445
							$1,339,165,627
NASA	FUEL	$14,134,901	$15,628,288	$9,768,171	$14,945,946	$19,410,616	$73,887,922
	MAINT	$63,322,608	$57,460,816	$62,620,943	$60,524,193	$64,090,142	$308,018,702
	CREW	$19,324,515	$18,497,110	$12,789,162	$12,863,644	$13,427,986	$76,902,417
	O'HEAD	$13,482,508	$10,549,204	$12,818,060	$16,693,878	$24,628,025	$78,171,675
							$536,980,716

Table 9 - Operational Aircraft Inventory by Mission

	2007	2008	2009	2010	2011
Environmental and Atmospheric Research and Monitoring	13	14	15	14	13
Fire Fighting and Disaster Response	175	172	167	179	168
Flight Inspection/Calibration	31	31	29	28	32
Law Enforcement	448	474	490	485	427
Mission Support	271	262	259	293	342
Research and Development, Including Scientific Experimentation	52	55	55	52	52
Resource Management	106	110	114	123	121
Search and Rescue	4	4	4	4	4
Surveillance	113	112	112	108	108
Training	74	70	70	55	44
Transportation of Cargo	13	11	11	13	13
Transportation of Passengers	17	13	13	16	18
Other - Not Specified	5	5	5	6	42
Total	**1322**	**1333**	**1344**	**1376**	**1384**